

# Stewartstown Borough Water Authority

Stewartstown Borough & Hopewell Township

2005

## Report to Consumers on Water Quality

### WATER SYSTEM INFORMATION

Stewartstown Borough Water Authority (PWS ID NO. 7670062) is proud of the fine drinking water it provides. This annual water quality report shows the source of our water and contains important information about water and health. Stewartstown Borough Water Authority will notify you immediately if there is any reason for concern about our water. We are happy to show you how we have surpassed water-quality standards. **We are proud to report that the water provided by Stewartstown Borough Water Authority meets and/or exceeds established water-quality standards.** We encourage public interest and participation in our community's decisions affecting drinking water. Regular Sewer & Water Authority meetings occur on the third Wednesday of every month and the Sewer & Water Committee meetings occur on the fourth Monday of every month, both meetings are held at the Stewartstown Borough Office meeting room (side door) at 7:30P.M. The public is welcome. Ira D. Walker, Jr. and Robert L. Hunt using technical assistance provided by the York, PA. Office of D.E.P. prepared this report. We'll be happy to answer any questions about Stewartstown Borough Water Authority and water quality, call at **717-993-2963 Ext. 205**.

The Stewartstown Borough Water Authority is a member of the American Water Works Association and the Pennsylvania Rural Water Works Association.

Stewartstown Borough has passed a Well Head Protection Plan Ordinance. The purpose for this Ordinance is to provide additional safeguards for our well water supplies, for now and especially in the future. The Stewartstown Borough Water Authority strives to continue to provide good service and quality water supply to all the customers within the system.

### SOURCE(S) OF WATER:

Stewartstown Borough Water Authority is supplied by groundwater pumped from 9 wells in and around Stewartstown Borough, located in southern York County and purchasing bulk water from York Water Co.

### DEFINITIONS

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

**Maximum Contaminant Level Goal (MCLG):** the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Residual Disinfectant Level (MRDL):** the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** the level of a drinking water disinfectant below which there is no known or expected risk to health. MCLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

**Action Level** – the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

\*N/A: not applicable \*ND: not detectable at testing level. \*PPB: Parts per billion or Micrograms per liter (ug/l)

\*PPM: Parts per million or Milligrams per liter (mg/l) \*pCi/L: Picocuries per liter (a measure of the radiation.)

### MONITORING YOUR WATER

Stewartstown Borough Water Department routinely monitors for contaminants in your drinking water according to federal and state laws. The following table shows the results of our monitoring for the period of January 1 to December 31, 2005. Stewartstown Borough Water Department tests for a wide range of contaminants such as VOC's, SOC's and others. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act. The data has been noted on the sampling results table.

### VIOLATIONS:

We are proud to report there were no MCL violations in 2005.

March 2005 we had a late chlorine residual reporting violation.

## DETECTED SAMPLE RESULTS

Contaminant	Violation Y/N	Level Detected	Unit of Measurement	Range	MCLG	MCL	Major Sources in Drinking Water
BARIUM 11/03	N	0.064	PPM	0.027 – 0.064	2	2	Erosion of natural deposits
NITRATE	N	7.76	PPM	4.82 – 7.76	10	10	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits
RADIUM-226 08/03	N	0.501	pCi/l	0.0 - 0.501	5 **	5 **	Erosion of natural deposits
CHROMIUM 11/03	N	2.3	PPB	0.0 - 2.3	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
NICKEL 11/03	N	5.2	PPB	0.0 - 5.2	100*	100*	
Contaminant	Violation	# of Positive Samples/Month	MCL			MCLG	Major Sources in Drinking Water
Total Coliform Bacteria	N	1 / June	≤5% monthly samples are positive			0	Naturally present in the environment.
Fecal Coliform Bacteria Or E-coli	N	0	Routine Sample and Repeat Sample are total coliform positive and one is also fecal coliform or E.coli Positive			0	Human and animal fecal waste
Contaminant	Violation	Level Detected	Unit of Measurement	# of Sites Above AL	Action Level (AL)	MCLG	Major Sources in Drinking Water
Lead 8/31/04	N	4.9	PPB	0	15	0	Corrosion of household plumbing
Copper 8/31/04	N	0.619	PPM	0	1.3	0	Corrosion of household plumbing
Disinfectants	Violation	Level Detected	Unit of Measurement	Range	MRDL	MRDLG	Major Sources in Drinking Water
Chlorine	N	0.58	PPM	0.20 – 0.58	4	4	Water additive used to control microbes
Organic Chemical Contaminant	Violation	Level Detected	Unit of Measurement	Range	MCLG	MCL	Major Sources in Drinking Water
Total Trihalomethanes (TTHMs)	N	3.2	PPB	0 – 3.2	N/A	80	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5)	N	3.1	PPB	0 – 3.1	N/A	60	Byproduct of drinking water chlorination

\* MCL has been rescinded, when MCL is established records will be updated

\*\* For combined radium

## HEALTH EFFECTS

**Barium** Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

**Chlorine** Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

**Combined Radium 226/228** Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

**Haloacetic Acids HAA5** Some people who drink water containing HAAs in excess of the MCL over many years may have an increased risk of getting cancer.

**Chromium** Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

**Nitrate** in drinking water at levels above 10 PPM is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

**Total Trihalomethanes (TTHMs)** Some people who drink water containing TTHMs in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems, and may have an increased risk of getting cancer.

## **EDUCATIONAL INFORMATION**

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.

(D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems.

Some of the contaminants, such as radon, lead and copper, do not have yearly testing requirements. In the years to come and as testing is required you will see results of any contaminants detected.

MCL's are set at very stringent levels for health effects. A person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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